

Amendments to and Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended): A braze assembly, comprising:

a first metal member including an exterior flange of the first metal member, the exterior flange including an inner surface;

a braze material including titanium and nickel; and

a ceramic member including a formed end, wherein the formed end of the ceramic member adjoins the inner surface of the exterior flange and is brazed to the first metal member with the braze material, wherein the ceramic member is a substantially close-ended ceramic can and includes a second metal member which forms an end cap to the ceramic member, which end cap completely closes the end of the ceramic can, wherein the end cap is an electrode, and wherein the electrode further comprises:

a narrow-diameter pin;

a broad-diameter braze surface adjoining the substantially closed-end of the ceramic member; and

a stimulating surface with grooves that increase the surface area of the stimulating surface.

Claim 2 (original): The braze assembly of Claim 1 wherein the braze assembly is used to hermetically seal the shell of a microstimulator.

Claim 3 (previously canceled)

Claims 4 - 5 (canceled)

Claim 6 (previously presented): The braze assembly of Claim 1 wherein the exterior flange forms a step at the end of the first metal member against which the formed end of the ceramic member may be received, and wherein the surface area between the first metal member and the ceramic member is capable of receiving an adequate amount of braze material to form a strong braze bond.

Claim 7 (original): The braze assembly of Claim 6 wherein the exterior flange provides lateral support to the braze assembly.

Claim 8 (currently amended): A braze assembly for a microstimulator, comprising:
a first metal member including an exterior flange of the first metal member, the exterior flange including an inner surface;
a braze material including titanium and nickel; and
a ceramic member including a formed end, wherein the formed end of the ceramic member adjoins the inner surface of the exterior flange and is brazed to the first metal member with the braze material;

wherein the ceramic member is a substantially close-ended ceramic can and a second metal member forms an end cap to the ceramic member, which end cap completely closes the end of the ceramic can, wherein the end cap is an electrode, and wherein the electrode further comprises:

a narrow-diameter pin;

a broad-diameter braze surface adjoining the substantially closed-end of the ceramic member; and

a stimulating surface with grooves that increase the surface area of the stimulating surface; and

wherein the first metal member, the braze material, and the ceramic member form a braze assembly that is used to hermetically seal a microstimulator shell.

Claim 9 (previously canceled)

Claims 10 - 11 (canceled)

Claim 12 (previously presented): The braze assembly of Claim 8 wherein the exterior flange forms a step at the end of the first metal member against which the formed end of the ceramic member may be received, and wherein the surface area between the first metal member and the ceramic member is capable of receiving an adequate amount of braze material to form a strong braze bond.

Claim 13 (original): The braze assembly of Claim 12 wherein the exterior flange provides lateral support to the braze assembly.

Claims 14-20 (canceled)

Claim 21 (new): A braze assembly, comprising:
a first metal member including an exterior flange of the first metal member, the exterior flange including an inner surface;
a braze material including titanium and nickel; and
a ceramic member including a formed end, wherein the formed end of the ceramic member adjoins the inner surface of the exterior flange and is brazed to the first metal member with the braze material, wherein the ceramic member is a substantially close-ended ceramic can and includes a second metal member which forms an end cap to the ceramic member, which end cap completely closes the end of the ceramic can, wherein the end cap is an electrode, and wherein the electrode further comprises:
a stimulating surface with grooves that increase the surface area of the stimulating surface.

Claim 22 (new): The braze assembly of Claim 21 wherein the braze assembly is used to hermetically seal the shell of a microstimulator.

Claim 23 (new): The braze assembly of Claim 21 wherein the exterior flange forms a step at the end of the first metal member against which the formed end of the ceramic member may be received, and wherein the surface area between the first metal member and the ceramic member is capable of receiving an adequate amount of braze material to form a strong braze bond.

Claim 24 (new): The braze assembly of Claim 23 wherein the exterior flange provides lateral support to the braze assembly.

Claim 25 (new): A braze assembly for a microstimulator, comprising:

- a first metal member including an exterior flange of the first metal member, the exterior flange including an inner surface;
- a braze material including titanium and nickel; and
- a ceramic member including a formed end, wherein the formed end of the ceramic member adjoins the inner surface of the exterior flange and is brazed to the first metal member with the braze material;

wherein the ceramic member is a substantially close-ended ceramic can and a second metal member forms an end cap to the ceramic member, which end cap completely closes the end of the ceramic can, wherein the end cap is an electrode, and wherein the electrode further comprises a stimulating surface with grooves that increase the surface area of the stimulating surface; and

wherein the first metal member, the braze material, and the ceramic member form a braze assembly that is used to hermetically seal a microstimulator shell.

Claim 26 (new): The braze assembly of Claim 25 wherein the exterior flange forms a step at the end of the first metal member against which the formed end of the ceramic member may be received, and wherein the surface area between the first metal member and the ceramic member is capable of receiving an adequate amount of braze material to form a strong braze bond.

Claim 27 (new): The braze assembly of Claim 26 wherein the exterior flange provides lateral support to the braze assembly.